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CLAIMS

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

1   1. A method of classifying a source publishing a document on a portion
2   of a network, comprising steps of:
3   electronically receiving a document;
4   based on the document, determining a source which published the
5   document; and
6   assigning a code to said document based on whether data
7   associated with the document published by the source matches with data
8   contained in a database.

1   2. The method according to claim 1, wherein said portion of said
2   network comprises a graphical multimedia portion of said network, said
3   source comprises a Web site publishing a home page, and said network
4   comprises the Internet.

1   3. The method according to claim 2, wherein said graphical multimedia
2   portion of said network comprises the World-Wide Web (WWW) and
3   said document comprises a Web document,
4   wherein said step of assigning a code includes determining that
5   the Web site comprises a first entity when there is a match of the Web
6   site with said data, and determining that the Web site comprises a second
7   entity when there is no match of the Web site with said data.

1   4. The method according to claim 1, wherein said step of determining a
2   source includes:
3   extracting a domain name from a predetermined uniform
4   resources locator (URL) database;

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1   querying a database for storing registered domain names; and

2   merging an address database with predetermined data.

1   5. The method according to claim 4, wherein said predetermined data

2   comprises Yellow Pages data,

3   wherein said step of determining further comprises:

4   characterizing uniform resource locators (URLs) by their

5   Internet Protocol (IP) addresses including identifying a plurality of

6   attributes based on the IP addresses of new URLs, a new URL being

7   retrieved and parsed into a domain name and directory path portions, and

8   determining, based on said domain name, whether a

9   selected URL is hosted on one of a true server and a shared server.

1   6. The method according to claim 5, said step of determining further

2   comprising:

3   for a shared server, determining a root path by searching for the

4   given domain name in a new URL database and identifying common

5   directory paths,

6   wherein, when no match is present, the URL is processed

7   subsequently at a later iteration, and, when a match is present, the root

8   path is set to a matching path.

1   7. The method according to claim 6, wherein said step of assigning a

2   code comprises:

3   automatically identifying a business associated with the source

4   publishing said document, said business being hosted on a Service

5   Provider (SP) Web server.

1   8. The method according to claim 7, wherein said step of assigning a

2   code further comprises:

3   receiving a URL based on said determining step; and

4   a URL determining step for determining whether said URL

5   comprises one of a root URL and a leaf URL.

1   9. The method according to claim 8, wherein said root URL comprises

2   an entry point for a home page on the World-Wide Web, and a leaf URL

3   comprises a link below a root URL,

4   wherein said URL determining step comprises:

5   parsing said URL into a domain name component and a

6   directory path component;

7   analyzing the domain name in said domain name

8   component to determine whether it is associated with an SP;

9   when the domain name is not associated with an SP,

10   checking the directory path component to judge whether a directory path

11   is missing, a missing directory path indicating a root URL;

12   when the domain name is associated with an SP, checking

13   whether a directory path does not exist to thereby determine that said

14   domain name comprises a root URL, and when a directory path exists,

15   then comparing the path to known SP Client Directory paths.

1   10. The method according to claim 9, further comprising:

2   when said URL is determined to be a root URL, analyzing a

3   home page associated with said root URL automatically to extract home

4   page data contained therein and assigning the home page data to the Root

5   URL being analyzed.

1   11. The method according to claim 10, further comprising:

2   comparing said home page data with data in a predetermined

3   business organizations database,

4   wherein, when there is a match, said code is assigned to the

5   corresponding root URL, and, when no match is found, said URL is

6   identified for subsequent analysis of lower-level hyperlinks during a next

7   iteration of said method.

1   12. The method according to claim 11, wherein when no match is found
2   at any level, said home page is identified as a personal page.

1   13. A method of automatically assigning a document a code for
2   distinguishing a first-type page from a second-type page, comprising
3   steps of:
4   electronically receiving a document;
5   based on the document, determining a source which published the
6   document; and
7   assigning a code to said document based on whether the source
8   matches with data contained in a database.

1   14. A search engine for use on a network for distinguishing between
2   business web pages and personal web pages, comprising:
3   means for parsing the content of a hyper-text markup language
4   (HTML) at a web address and searching for criteria contained therein;
5   means for analyzing a uniform resources locator (URL) of the
6   web address to determine characteristics thereof of a web page at the web
7   address;
8   means for determining whether said criteria match with data
9   contained in a database; and
10   means for cross-referencing a match, determined by said
11 determining means, to a second database, to classify a source which
12 published the web page.

1   15. A search engine according to claim 14, wherein said criteria include
2   at least one of an address, a telephone numbers, a facsimile number, a
3   contact and a key-word contained in said HTML, and

4   wherein the characteristics of said web page include a

5   geographical location and a web host computer.

1   16. A search engine according to claim 14, wherein said database

2   includes a Business Semantic Terminology database having information

3   related to business categories in a Yellow Pages directory.

1   17. A search engine according to claim 14, wherein said second database

2   includes a Yellow Pages database.

1   18. A search engine according to claim 14, wherein said web page

2   comprises hyperlinks, and said means for parsing comprises an indexer

3   robot for traversing said hyperlinks in said web page and a web index

4   database,

5   said indexer robot for indexing a content of said web page into

6   said web index database.

1   19. A search engine according to claim 14, wherein said means for

2   analyzing comprises:

3   means for determining whether said URL comprises one of a root

4   URL and a leaf URL.

1   20. A search engine according to claim 19, wherein said root URL

2   comprises an entry point for the web page on the World-Wide Web, and

3   a leaf URL comprises a link below a root URL, said search engine

4   further comprising:

5   means for parsing said URL into a domain name component and a

6   directory path component;

7   means for analyzing the domain name in said domain name

8   component to determine whether it is associated with an SP;

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9   means for checking the directory path component to judge

10   whether a directory path is missing, when the domain name is not

11   associated with a service provider (SP), a missing directory path

12   indicating a root URL, and for checking whether a directory path does

13   not exist to thereby determine that said domain name comprises a root

14   URL, when the domain name is associated with an SP;

15   means for comparing the path to known SP Client Directory

16   paths, when a directory path exists;

17   means for analyzing a home page associated with said root URL,

18   when said URL is determined to be a root URL, thereby automatically to

19   extract home page data contained therein; and

20   means for assigning the home page data to the Root URL being

21   analyzed.